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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,774	09/19/2003	Kwan Wu Chin	CML01195AC	9433
22917	7590	07/16/2007	EXAMINER	
MOTOROLA, INC.			TANG, KAREN C	
1303 EAST ALGONQUIN ROAD				
IL01/3RD			ART UNIT	PAPER NUMBER
SCHAUMBURG, IL 60196			2151	
			NOTIFICATION DATE	DELIVERY MODE
			07/16/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.Schaumburg@motorola.com  
APT099@motorola.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/666,774	<b>Applicant(s)</b> CHIN ET AL.	
	<b>Examiner</b> Karen C. Tang	<b>Art Unit</b> 2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

- This action is responsive to the amendment and remarks file on 6/8/07.
- Claims 1-20 are amended are for further examination.

### **DETAILED ACTION**

#### ***Response to Arguments***

Applicant's arguments filed 6/8/07 have been fully considered but they are not persuasive.

Applicant argues that the cited art Inouchi does not teach either expressly or inherently that "DNS setup reply packet" and "DNS setup packet" because both DNS setup reply packet and DNS setup packet comprising a global name of a home network, and a private address of a DNS server.

The examiner respectfully disagrees and the argument is respectfully traversed.

Inouchi teaches the DNS setup packet and DNS reply packet which satisfied the limitations. First, Inouchi disclosed in order for a host within one VPN to communicate with an different host in different VPN, there is a need to ensure there is no collision occur between the address space inside a private network with the address space of public space (global and private address, and refer to 0005), and a query (DNS setup packet), was issue to initiate the communication, and the query, provides a name resolution (illustration in Fig 1, where the VPN 5 utilizing an IPv4 private space, which is the private space of their own DNS, issue an query, and then a reply packet to the request packet is issued). Inouchi further indicate the details of the content of the query, which contains (name of the host, which is the global name, and the private space IP, the packet is inherently contains the IP private space of the DNS server because the query caused the packet to be sent from one DNS server to another, therefore, DNS server knows

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where to sent the packet to by reading on the content of the packet's private IP address of the DNS server, refer to 0054, Lines 6-10). The same logic also apply to the respond packet (refer to 0055), where, the name of the global address is provided, and also the private space of the DNS server is provided as well (refer to 0055, because the host that made the request, received the packet via the its own DNS server, so the packet must be routed back via DNS server first by the information provided within the packet, and then DNS server routed the packet back to it's original host, refer to 0057).

Applicant, in its own specification (page 11, Lines 13-25), indication that by redirecting the request for a given domain name to one or more IP address, the DNS-ALG interface with an internet DNS (DNS within VPN) with its own IP address, and an external DNS with its own IP address (needless to say, Inouchi indicates the redirecting request query/packet, and discussing how the internet DNS interacting with DNS-ALG, therefore, the query is inherently contains the DNS private address). Further, Applicant further stating that in the specification, by redirect the DNS request (which Inouchi also disclosed, refer to 0054), a file may be created in the server directory with the global domain name and the IP address of the server that are authoritative for the domain are inserted into the file. Therefore, it can be concluded, that by the act of redirecting the request packet/query, the global domain name and IP address of the server is provided, and the DNS-ALG can received the global domain name and other global names, therefore, either inherently or explicitly, the cited art Inouchi disclosed the limitations that applicant tried to claim.

Applicant argues that the cited art Inouchi does not teach the limitations indicated in Claims 8. The Examiner respectfully traversed the argument and disagrees.

Inouchi disclosed all the limitations in Claims 8, for example, passage 0054 disclosed the act of forwarding when the determination steps has been made that the request is not for said home network (DNS-ALG 2a), and then the forwarding steps beings (DNS-ALG 2a forward to DNS-ALG 2b).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Inouchi et al hereinafter Inouchi (US 2006/0227780).

1. Referring to Claim 1, 8, and 11, Inouchi disclosed a gateway for communicating between two or more home network, comprising: at least one communications interface for transmitting and receiving data (TR, comprising interfaces to transmit/receive package, Abstract); a storage unit for storing data and instruction to be performed by a processing unit (14, refer to 0047); and a processing unit coupled to said at least one communications interface and said storage unit (refer to CPU, refer to 0047), said processing unit is programmed to: transmit to a remote gateway via a tunnel of a virtual private network (VPN) a DNS setup packet comprising a global name of a home network, and a private address of a DNS server is said

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home network (it is inherent that IPv4 and IPv6, comprising the global name of a home network and a private address of a DNS server, refer to 0054, 0058, 0059: For supporting information regarding IPv4 and IPv6, and how it can be converted from one to another, and how the address information being extracted from the IPv4 and IPv6 package, please refer to EP 1087575); to receive from said remote gateway via said tunnel a DNS setup reply packet comprising a global name of another home network, and a private address of a DNS server in said other home network (it is inherent that IPv4 comprising the global name of a home network and a private address of a DNS server, refer to 0061 and 0062); and to configure an application level gateway of said DNS server (DNS-ALG) in said home network dependent upon said DNS setup reply packet to redirect DNS name requests for said global name of said other network to said DNS server in said other network (converting the IPv6 to IPv4 address, refer to 0057).

2. Referring to Claim 2 and 12, Inouchi disclosed wherein said processing unit is programmed to extract from said DNS setup reply packet said global name of said other home network and said private address of said DNS server in said other home network (refer to 0082, 0084).

3. Referring to Claim 3, and 13, Inouchi disclosed wherein said processing unit is programmed to resolve address conflicts between said home network and said other home network (refer to 0094).

4. Referring to Claim 4, and 14, Inouchi disclosed wherein said processing unit is programmed to generate a DNS setup packet comprising said global name of said home network and said private address of said DNS server in said home network (refer to 0082 and 0086).

5. Referring to Claim 5, and 15, Inouchi disclosed wherein said global names of said home network and said other home network are fully qualified domain names (FQDNs) (IPv4 and IPv6 packets comprising FQDNs, refer to 0008 and 0009).

6. Referring to Claim 6, and 16, Inouchi disclosed wherein configuring said DNS-ALG comprises adding a redirect data structure in a configuration data structure of said DNS-ALG (refer to 0056).

7. Referring to Claim 7, and 17, Inouchi disclosed regarding wherein a two faced DNS system coupled to said DNS-ALG in said home network, said two face DNS system comprising an internal said DNS server and an external side DNS server, said internal side DNS server resolving host names received via said VPN tunnel to corresponding private addresses. It is obvious to comprise the two faced DNS system coupled to said DNS-ALG in said home network (refer to 0015, 0011 and 0005).

8. Referring to Claim 18, Inouchi disclosed wherein said processing unit is programmed: to determine if a domain name in a domain name request received by said DNS-ALG in said home network is not for said home network;

if said domain name request is determined to not be for said home network, to forward said domain name request via said virtual private network (VPN) tunnel to an application level gateway of a DNS (DNS-ALG) of another home network specified by a redirector configured in said DNS-ALG of said home network (different network, refer to 0014, 0019, 0020, 0046 and 0054).

9. Referring to Claims 9 and 19, Inouchi disclosed wherein said processing unit is programmed to resolve a global domain name for said domain name request and to forward a reply to a requesting host in response to said request, if said domain name is determined not to be for said home network and said DNS-ALG of said home network does not have a redirector specified (from the different network, refer to 0014, 0019, 0020, 0046).

10. Referring to Claim 10 and 20, Inouchi disclosed wherein said processing unit is programmed, if said domain name request is determined to be for said home network, to forward a reply to said requesting host from one of an external side DNS server and an internal side DNS server of said home network dependent upon whether the domain name request is from one of an internal host of said home network and said VPN, respectively (from the same network, refer to 0013, 0019, 0020, 0046).

### ***Conclusion***

**Examiner's Notes:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the



specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen C. Tang whose telephone number is (571)272-3116. The examiner can normally be reached on M-F 7 - 3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on (571)272-~~3340~~. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KT

*Valencia Martin Wallace  
SPE Art Unit 2151*